

SECTOR 1

SOUTH COAST OF IRELAND

Plan.—This sector describes the S coast of Ireland from Mizen Head to Carnsore Point (52°10'N., 6°22'W.). The descriptive sequence is from W to E.

General Remarks

1.1 The S coast of Ireland between Mizen Head and Carnsore Point, 138 miles ENE, consists of predominately rocky, cliffy, and boulder-strewn indentations which in its W part, are interspersed by numerous headlands and peninsulas. The E part of this section of the coast is bordered by rather long stretches of sandy shore backed by lowlands. A few offlying dangers lie seaward of the salient points.

The coast in the vicinity of Cape Clear (51°25'N., 9°31'W.) is high and bold, increasing in height to the N. This part of the coast is the ordinary landfall for vessels from the W. The most prominent objects in the vicinity are Mizen Peak, Cape Clear, Mount Gabriel, and Fastnet Rock. The W part of the coast is frequently obscured by haze, and during the winter months heavy gales and seas are common. Farther E, the seas are less turbulent. Cork Harbor, with the ports of Cork, Cobh, and Ringaskiddy within its confines, lies 63 miles ENE of Mizen Head and is an important commercial port.

Winds—Weather.—During the winter season, the prevailing winds are from the SW quadrant. Due to migratory cyclones, winds of force 3 may be expected from all quadrants. The wind direction is fairly well distributed around the compass in the spring, being of force 3 or less. In the summer season, the most frequent wind directions are from S through W to N, force 3 to 8.

Fog, which would reduce the visibility to 1 mile or less, is reported 1 to 5 percent of the time in every month with the exception of May. About 10 to 15 percent of the monthly observations have visibilities of less than 5 miles.

The mean air temperature ranges from 6°C in February to 17°C in August.

Tides—Currents.—Along the S coast of Ireland, the currents generally follow the direction of the coast in NE and SW directions at rates of 1 to 2.5 knots. Between Fastner Rock and Cork Harbor, the current setting E begins about 4 hours and 15 minutes before HW at Cobh and the opposite current about 1 hour and 45 minutes after HW at Cobh. Between Cork Harbor and Carnsore Point, the times at which the currents begin become gradually later. During certain times of the year the currents set either E or W along the entire coast between Fastnet Rock and Carnsore Point. At other times, it sets E or W from Fastnet Rock to Cork Harbor, and in the opposite direction between Cork Harbor and Carnsore Point.

The offshore currents are not strong between Fastnet Rock and Cork Harbor, the spring rate of 1 to 1.5 knots being the maximum. Between Cork and Waterford Harbors, the currents are weak; between Waterford Harbor and Carnsore Point, the

currents increase and their rates at springs may be as much as 2 to 2.5 knots about 5 to 6 miles SE of the point.

The wind has considerable effect on the duration and rate of the currents. A strong, prolonged W or SW wind will increase the current setting E and reduce the opposite set. A similar E wind will increase the current setting W and reduce the opposite set.

Nearer the land, the directions of the currents, their rates and the times at which they begin are affected by local conditions and may differ widely from the general conditions experienced offshore.

Regulations.—An IMO-adopted Traffic Separation Scheme (TSS), which is shown on the chart, is situated about 5 miles SE of Fastnet Rock.

Caution.—Numerous fishing vessels of all sizes may be encountered at all times of the year off the S coast of Ireland.

Submarines exercise frequently in the waters off the S coast of Ireland.

Drilling rigs may be encountered in the waters off the S coast of Ireland.

Coastal Features

1.2 Mizen Head (51°27'N., 9°49'W.) is the SW extremity of Cruckaun Island, which is connected to the coast by a narrow neck of land. A ruined tower stands at an elevation of 128m about 0.5 mile NE of Mizen Head and about 0.5 mile NNE of the tower is Mizen Peak, 230m high, the highest hill in the vicinity. Mizen Head has been reported to be a good radar target at a distance of 17 miles. A light is shown from a structure on Mizen Head. A racon is situated at a white building with radio masts, 23m high, close to it, about 0.2 mile NNE of the light structure.

Carrigower Rock lies about 0.5 mile E of Mizen Head and is awash at HW.

Mount Gabriel, 404m in elevation, rises about 12 miles NE of Mizen Head and has conspicuous radar domes near the summit.

Tides—Currents.—Close off Mizen Head the tidal currents attain a maximum velocity of 4 knots at springs and cause a dangerous race, especially when the wind is opposed to the tidal current. The velocity of the tidal current decreases as the distance from Mizen Head increases. The spring velocity in both directions, 4 or 5 miles from the land, is 1.5 knots. Off Mizen Head the E current sets S, and the W current sets NW.

Between Mizen Head and Crookhaven the currents set E and W in the direction of the coast. The spring velocity in both directions is 0.8 knots.

Fastnet Rock (51°23'N., 9°36'W.) lies about 9 miles ESE of Mizen Head. Close around the rock the depths are shoal and the bottom rocky, and a flat rock, with a least depth of 3m, which often breaks, lies about 0.2 mile NNE. Fastnet Rock has been reported to be a good radar target at about 19 miles and is a very prominent isolated mark. A light is shown from a

prominent gray granite tower, 54m high, erected on the rock; a racon transmits from the light.

Barley Cove (51°27'N., 9°46'W.), entered about 1 mile E of Mizen Head, may be identified by the ruins of a tower on Brow Head, its E entrance point. Barley Rock, also known as Devil's Rock, which dries about 2.7m, lies near the middle of the cove.

1.3 Crookhaven (51°28'N., 9°42'W.) (World Port Index No. 34270), is entered between Streek Head, 3 miles NE of Brow Head, and Sheemon Point, the E extremity of Rock Island, 0.5 mile N. It affords anchorage for vessels with a draft of less than 4.5m and is primarily for small craft. A light is shown from a white tower standing on Rock Island.

The entrance is about 0.2 mile wide and has depths of 15m which decrease gradually to the head of the harbor. Alderman Rocks, 9.1m high, lie 0.2 to 0.3 mile NE of Streek Head, with Alderman Sound, a narrow channel, nearly blocked by dangers, between.

Black Horse Rocks, which dry, extend about 135m N from Alderman Rocks. A beacon stands on the N part of these rocks; sunken rocks extend more than 90m NE from the beacon.

There are no licensed pilots, but fishermen will board vessels displaying the pilot signal.

1.4 Ballydivlin Bay (51°29'N., 9°41'W.) is entered between Sheemon Point and Ballyrisode Point, about 2 miles NE. Spanish Point, about 0.4 mile N of Sheemon Point, is fringed by foul ground extending, in places, 135m offshore.

Knocknamaddree, a conspicuous mountain, rises to a height of 311m about 2.5 miles NW of Sheemon Point; at the termination of its S slope, about 1 mile SE of the summit, is Callaros Oughter, a conspicuous cone, 156m high.

Knockaphuca (51°31'N., 9°42'W.), a conspicuous hill with a conspicuous cross on the summit and a steep fall W, rises to an elevation of 253m, about 1.5 miles NW of Ballyrisode Point

Reenaveal Ledge consists of two detached ledges, with least depths of 7.3m and 8.2m, which lie about 0.5 mile NE of Sheemon Point and as far as 0.4 mile offshore. Amsterdam Reef, which dries, lies about 0.4 mile S of Ballyrisode Point and Amsterdam Rock lies between the two. Several detached 16.4m patches lie outside the 20m curve within the limits of the bay.

Anchorage.—Ballydivlin Bay is exposed to S and SE winds, but in offshore winds, sheltered anchorage may be obtained in depths of 20 to 27m.

Directions.—The W fall of Knockaphuca in range with Black Hole of Coosduf, an inlet on the N shore of the bay about 0.8 mile NNE of Spanish Point, bearing 345°, leads E of Reenaveal Ledge. The N extremity of Spanish Point in range with Castlemehigan, a hill, 147m high, bearing 247°, leads NW. The summit of Callaros Oughter in range with Spanish Point, and also in range with Cape View House, bearing 298°, leads SW of the ledge.

The S extremity of Sheemon Point, bearing 240°, leads SE of Amsterdam Reef, and the W fall of Knockaphuca in range with Ballydivlin House, bearing 324°, leads SW of Amsterdam Reef.

1.5 Toormore Bay (51°30'N., 9°39'W.) is entered between Ballyrisode Point and Castle Point, about 1.2 miles ESE. Castle Point may be identified by the ruins of a square castle on a hill, 12m high, about 275m E of the point. Tower Hill, round-topped, 107m high, and on which are the conspicuous ruins of Leamcon Tower, rises about 1.5 miles NE of Castle Point.

Duharrig, an islet, 5.2m high, lies 0.4 mile SW of Castle Point. Carthy's Ledge, the outermost danger in the S approach to Toormore Bay, has a least depth of 7.6m, and lies 0.7 mile S of Duharrig. Several detached dangers lie in the S approach to Toormore Bay which has general depths of 12.8 to 20.1m. The W fall of Knockaphuca in range with Ballydivlin House, bearing 324°, leads SW of these dangers.

Anchorage.—Toormore Bay affords good anchorage with offshore winds, in depths of 12.8 to 23.8m, sand and stiff clay, with **Ballyrisode Point** (51°30'N., 9°40'W.) bearing 240°, distant 0.7 mile.

1.6 Barrel Sound (51°29'N., 9°38'W.), a narrow channel with depths of 9.1 to 24m, but obstructed in midchannel by a 4.6m rock, leads between Castle Point and Duharrig. This channel should not be used without local knowledge.

Goat Island, about 1.2 miles E of Castle Point, has rocky shores, and rises to an elevation of 32m; Little Goat Island lies close off its S side from which it is separated by a narrow precipitous chasm. A conspicuous stone beacon, 4.9m high, stands on a hill near the S extremity of Little Goat Island.

Man of War Sound, which joins Lough Buidhe N of Goat Island, passes between that island and Turf Island, nearly 0.5 mile W. Man of War Sound, although deep in the fairway, has depths of less than 8.2m along its edges.

Lough Buidhe leads between Goat Island and the mainland N, and has a least depth of 12.2m in the fairway.

Long Island Bay

1.7 Long Island Bay, entered between the coast N of Goat Island and Cape Clear, about 5.2 miles SE, is encumbered with numerous islets, rocks and shoals, but there are several sheltered anchorages. The principal anchorages are Long Island Sound, Castle Island Sound, and Skull Harbor, on the N side of the bay, and Roaringwater Bay at the NE corner of Long Island Bay.

Tides—Currents.—The currents in the entrance of Long Island Bay set E and W from a position about 1 mile S of Alderman Rocks to 1 mile N of Fastnet Rock.

The E current begins about 5 hours before HW at Cobh and the W current begins about 1 hour 15 minutes after HW at Cobh. The spring velocity in both directions is about 2.5 knots. The currents are stated to begin about 30 minutes later at springs and about 30 minutes earlier at neaps.

The currents decrease in strength from the entrance to the head of Long Island Bay. The E current sets SE and S through all the channels between the islands (except between Long Island and Castle Island), E to Ilen River and SE through Long Island to Baltimore Harbor. The W current sets in the opposite direction.

Off-lying Bank.—Croa-Lea (51°26′N., 9°37′W.), a rocky bank with a least depth of 27m, lies in the W approach to Long Island Bay, about 3.2 miles S of Little Goat Island; there is a considerable heave of the sea over it in heavy W gales.

Long Island lies with Duff Point, its SW extremity, about 0.5 mile E of Goat Island. Duff Island lies close S of Duff Point. Long Island is 29m high near its center, where it slopes to Copper or Long Island Point, its low, shelving, NE extremity. A light is shown from a white round tower, 14m high, erected on **Copper Point** (51°30'N., 9°32'W.).

The S side of Long Island is clear of dangers outside a distance of 90m until within 0.8 mile of Copper Point. Geenwan Rocks, above water, extend 0.1 mile offshore, about 0.7 mile SW of Copper Point, and Budalogh Shoal, a rocky shoal with a depth of 7.3m, lies about 0.2 mile offshore and about 0.6 mile SSW of Copper Point. Streek Head, bearing about 257°, and open S of Little Goat Island, leads S of these dangers, and the summit of Mount Gabriel in range with Copper Point, bearing 356°, leads E of them.

Castle Island (51°31'N., 9°30'W.) lies with its SW end about 0.8 mile E of Copper Point. Mhweel Ledges, consisting of several rocks above water and rocks which dry, extend about 0.25 mile WSW of the W extremity of the island, and Castle Island Grounds, with a least depth of 5.5m, extend about 0.3 mile SSW of Mhweel Ledges, terminating at Arnelia Rock, over which there is a depth of 2.1m. A lighted buoy is moored about 275m SW of Amelia Rock.

Long Island Channel is the channel between Long Island and the mainland N; it affords sheltered anchorage for a number of vessels of shallow draft. There are three channels of approach to Long Island Sound; from the W, vessels must enter the channel via Man of War Sound, and transit Lough Buidhe; vessels can also enter Goat Island Sound from the W, passing between Goat and Long Islands; and a third channel, E of Long Island, passes between Copper Point and Castle Island Grounds. Goat Island Sound is only 0.2 mile wide at its N end, but has a least depth of 20.7m. The W entrances lead over a bar, between the W end of Long Island and **Coney Island** (51°30'N., 9°34'W.), 11.9m high, N of it, and over which there is a least depth of 5.1m.

Long Island Channel is entered from E between Copper Point and Skull Point, about 0.5 mile NNW, but the anchorage space is contracted by a shoal bank which fringes the N side of Long Island, and extends as far as 0.2 mile offshore at Cush Spit, a gravel bank, with a depth of 0.9m and steep-to, lying about 0.6 mile W of Copper Point. A buoy marks the N edge of Cush Spit.

The N shore of Long Island Channel is fringed by a bank with depths of less than 5.5m, which extends as far as 0.3 mile offshore E of Coney Island. A 3.7m patch lies about 0.2 mile off the S shore, about 0.6 mile E of Coney Island and a shoal, with a least depth of 4.6m, lies in the fairway about 0.3 mile E of Coney Island.

The middle of Goat Island Sound is deep, but foul ground extends over 0.2 mile S of the E extremity of Goat Island. Garillaun Islands, close SW of which is Sound Rock which dries 1.5m, extend about 0.2 mile WNW from the SW end of Long Island, narrowing Goat Island Sound to about 0.2 mile.

Tides—Currents.—In Lough Buidhe the E current has a spring velocity of 1 knot, and the W current, attains a spring velocity of 0.8 knot. In Long Island Sound the spring velocity in both directions is about 1.5 knots.

The tidal currents set through Lough Buidhe, Long Island Channel and Castle Island Sound. During the E current in these sounds, the currents set S through Man of War and Goat Island Sounds, but N between Long Island and Castle Island; during the W current the directions are reversed.

Anchorage.—Anchorage may be obtained close within the E entrance of Long Island Channel, in about 11m, with the old lighthouse, about 1.5 miles ENE of Cape Clear, in range with Copper Point Light, bearing 156°, and the ruined tower on Brow Head in range with the S end of Coney Island, bearing about 248°.

The W anchorage is nearly in mid-channel, close E of the bar, about 0.2 mile SE of Coney Island, in depths of about 9.1m.

Castle Island Sound (51°31′N., 9°30′W.) is free of dangers, but is obstructed at its E end by Horse Ridge, which dries 0.3m. The sound is entered between the NW extremity of Mhweel Ledges and Coosheen Point, about 0.5 mile NW. Joans Rocks lie close SW of Coosheen Point.

Anchorage.—The anchorage recommended is in depths of about 11m, in mid-channel, S of Capple Point, the latter lying on the N shore about 1 mile ENE of Coosheen Point.

1.8 Skull Harbor (51°31'N., 9°32'W.) (World Port Index No. 34280) is entered between Coosheen Point and Skull Point, 0.4 mile W and extends N for about 1 mile to its head.

Bull Rock (51°31'N., 9°32'W.), marked by a beacon, lies about midway between Coosheen Point and Skull Point. There are no other dangers and the harbor affords sheltered anchorage to vessels of moderate draft in depths of 6.4 to 7.3m, with good holding ground, for about 0.5 mile within the entrance. There are depths of 10m in the entrance which decrease to 3m at the head of the harbor. There is a small pier with a depth of 2m alongside. The harbor is used by fishing boats, small craft, and pleasure craft.

Skull village is situated on the W side near the head of the harbor, and a conspicuous disused chimney stands on a hill on the E side of the harbor. Range lights on metal masts are shown from the head of the bay and indicate the entrance E of Bull Rock. The range lights are reported to be difficult to distinguish by day.

Anchorage.—The recommended anchorage is in a depth of 6.4m, 0.5 mile within the entrance, with the extremity of Coosheen Point, bearing 151°, and the chimney standing on the hill on the E side of the harbor, bearing 066°.

Roaringwater Bay (51°31'N., 9°28'W.), an extensive shallow inlet at the N corner of Long Island Bay, is entered between Horse Island, about 0.5 mile ENE of Castle Island, and West Skeam Island, about 0.6 mile SSE of Horse Island.

Carthy Island lies in the middle of the approach to Roaringwater Bay about 0.5 mile S of Castle Island; it is the outermost of a group of islets and rocks which extend ENE. Carthy Sound lies between the group and Castle Island. Moore's Rock lies about 1.5 miles ENE of Carthy Island.

Roaringwater Bay is approached between Castle Island and West Calf Island about 1.5 miles S. Middle and East Calf Islands extend NE. The channel between East Calf Island and Hare Island, about 1 mile NE, is obstructed in midchannel by Anima Rock. Foul ground extends about 0.8 mile SW from Hare Island. The channel between Carthy Island and the Calf Islands is encumbered by numerous rocks.

In the inner part of Roaringwater Bay, Mannin Island, 17m high, lies close offshore at the head of the bay, about 1.7 miles NE of Cus Point, the E extremity of Horse Island.

Carrigviglash Rocks, about 2.1m high, lie at the S end of an extensive mudflat, about 0.5 mile S of Mannin Island.

Tides—Currents.—In the vicinity of the Calf Islands, the E tidal current sets toward the entrance of the Ilen River in the E corner of Long Island Bay, at a velocity of about 1 knot.

Anchorage.—Anchorage may be taken in depths of 6.4 to 7.3m, between 0.3 and 0.5 mile E of Horse Island, with Cus Point bearing between 284° and 334°; better shelter may be taken about 0.5 mile farther NNE, in 4.9m, sand, with Knocktower and Keown Points, two projections on the mainland, about 0.6 mile W and NW; respectively, of Mannin Island, in range bearing 013°, and **Tober Point** (51°32'N., 9°24'W.), about 0.5 mile NE of Mannin Island, in range with the SE edge of Mannin Island, bearing 057°.

Sheltered anchorage may also be obtained in the inner part of the bay, in 4.9m, mud, with Kilcoe Castle, close NE of Mannin Island, bearing between 284° and 306°, distant about 0.4 mile, or S of Carrigviglash Rocks, in about 6.4m, with Kilcoe Castle bearing 000°, distant about 0.8 mile.

1.9 The SE side of Long Island Bay is formed by the NW side of Cape Clear Island and the NW side of Sherkin Island. The ruins of Doonanore Castle stand on the NW side of Cape Clear Island, about 0.8 mile NNE of the Bill of Cape Clear, the SW extremity. Gascanane Sound, the channel between Cape Clear and Sherkin Island, is about 1 mile wide between Lahan Point, the E extremity of Cape Clear Island, and Curra Point, the SW extremity of Sherkin Island. Lahan Point rises to Mount Lahan, 78m high, 1.5 miles SW. An old disused lighthouse stands on the cliffs, which rise precipitously to an elevation of 133m, about 1.2 miles SW of Lahan Point.

Cape Clear Island is steep-to on all except its N side, from which a group of islets and rocks extend about 0.5 mile offshore, terminating at Bullig Reef. The old telegraph tower E of Baltimore Harbor in range with the white chapel at Sherkin, bearing 082°, leads N of Bullig Reef.

Gascanane Sound (51°27'N., 9°27'W.) is divided into two channels by Carrigmore Rocks, a group of rocks 6.1m high, about 0.4 mile NE of Lahan Point, with Gascanane Rock, which dries 1.8m, lying nearly 180m W of the group. The better channel, which is deep, passes E of Carrigmore Rocks and W of Badger Island, lying about 0.1 mile W of Curra Point (51°27.0'N., 9°26.0'W.). Crab Rock lies about 0.1 mile N of Badger Island.

Tides—Currents.—Between the Bill of Cape Clear and Bream Point, near the coast, the currents are confused, but it is estimated that they set as follows: The E current divides off the Bill of Cape Clear, and sets NE along the N side of Clear Island, and S, with a heavy confused sea, along the coast to Bream Point. There is a large eddy E of Bream Point, which sets N toward the S side of Clear Island, then W and S along the coast to Bream Point. The W current forms an eddy W of

Bream Point, which sets N, then E toward the Bill of Cape Clear, and finally S along the coast to Bream Point. A race forms off **Bream Point** (51°25′N., 9°31′W.) during the strength of the currents in both directions.

The E tidal current sets SE, and the W current sets NW, in the directions of the channels through Gascanane Sound. The spring velocity in both directions is 3 knots. There are dangerous eddies near the rocks in the middle of the sound.

1.10 South Harbor (51°28'N., 9°24'W.), an inlet located on the S coast of Clear Island, is used only by small craft and is subject to heavy swells.

Horseshoe Harbor, an inlet located on the SE side of Sherkin Island, affords anchorage to small craft in depths of 5m, but has a very narrow entrance and rocks off the W shore.

Barrack Point (51°28'N., 9°24'W.) is located close N of Horseshoe Harbor on the E side of Sherkin Island. A light is shown from a structure, 8m high, standing close W of the point.

Baltimore Harbor (51°29'N., 9°22'W.) (World Port Index No. 34300) is a port located N of Baltimore Bay in a position about 16 miles E of Mizen Head. The port consists of a fishing village and yachting basin within a small natural harbor which lies between Sherkin Island and the mainland to the E. Spanish Island and Ringarogy Island, about 1 mile N of the entrance, form the head of the harbor.

Tides—Currents.—Spring tides rise 3m and neap tides rise 2.4m.

The tidal currents enter and leave Baltimore Harbor both through the sound and through the entrance, N of Sherkin Island. The currents meet in the vicinity of Lousy Rocks, near the middle of the harbor, and set NE between Ringarogy Island and the E shore of the harbor; the ebbs set out of the harbor in the opposite direction. The incoming current starts about 5 hours and 45 minutes after HW at Cobh and the outgoing current starts about 30 minutes before HW at Cobh.

Depths—Limitations.—The harbor may be entered from Baltimore Bay or by the sound which is a narrow channel between Sherkin Island and Spanish Island. The sound is used mainly by small craft and fishing vessels and has a least charted depth of 6.2m.

The main entrance, about 0.2 mile wide, lies between Barrack Point and Beacon Point and has depths of 18m decreasing to 4.2m in the vicinity of Lousy Rocks, about 0.5 mile N of the entrance. North and E of these rocks the depths are less than 3.6m. The entrance channel between the rocks and foul ground extending from Barrack Point and Beacon Point, is about 60m wide.

Vessels of up to 1,000 dwt with drafts of up to 7.3m have been accommodated at the anchorage within the harbor.

The North Pier has a depth of 1.3m on its S side which is for fishing vessels only; the N side of the pier has depths of up to 2.1m and can accommodate small craft. The South Pier dries at its inner end with depths increasing to 1.5m at the pierhead.

Aspect.—The entrance is not easily distinguished, but a vessel approaching from E may identify a tower on a hill, 101m high, about 1.2 miles E of Beacon Point. On a closer approach, Lot's Wife, a stone tower close within Beacon Point,

and the conspicuous lighthouse on Barrack Point, may also be identified.

Pilotage.—There are two pilots available, but pilotage is not compulsory.

Anchorage.—Vessels of suitable size can find anchorage in the harbor according to their draft. Caution should be taken to avoid the telegraph cable between **Tramadroum** (51°29'N., 9°23'W.) and Abbey Strand, lying WSW on Sherkin Island.

The Ilen River discharges into the N part of Baltimore Harbor through the sound. **Turk Head** (51°30'N., 9°25'W.) is the N entrance point of the river. Anchorage may be taken, in depths of 9.1 to 16.5m, in a narrow reach which extends for about 0.2 mile E and W of Turk Head.

Caution.—Foul ground extends about 135m SE from the shore close SW of Barrack Point, the W entrance point; Wilson Rock, at the outer end, dries about 3.1m. A rocky ridge, with depths of 4 to 9.1m, extends 150m NE from Barrack Point, leaving a deep channel W of Loo Rock Buoy.

Foul ground also extends about 135m offshore between Beacon Point, the E entrance point, and Loo Point, 275m N. Loo Rock, which dries 1.2m, lies at the outer end of this foul ground about 135m WSW from Loo Point. It is marked on its SW side by a lighted buoy. Quarry Rock, 0.2 mile NNE of Loo Rock, has a depth of 1.5m, and is steep-to on its W side.

Lousy Rocks (51°29'N., 9°23'W.), near the middle of Baltimore Harbor and about 0.5 mile N of Loo Point, dry 0.2 to 2.8m. A beacon stands on the SE rock. Ransome Rock, with a depth of 1.8m, lies about 250m W of the beacon marking Lousy Rocks. Skipjack Rock, which dries 0.6m, lies between Ransome Rock and the W shore. Globe Rocks lie about 0.15 mile from the W shore, about 0.1 mile N of Skipjack Rock.

Wallis Rock (51°29'N., 9°29'W.), with a depth of 0.9m, lies 0.2 mile ENE of the beacon marking Lousy Rocks; it is marked close on its S side by a lighted buoy.

Vessels should steer a mid-channel course through the entrance favoring the W shore in order to avoid Loo Rock. When the church of Baltimore bears about 055° and is visible over the sandy beach at Tramadroum, about 0.5 mile NE of Barrack Point, course may be altered to the anchorage.

1.11 Kedge Island (51°28'N., 9°20'W.) lies about 2 miles ESE of Barrack Point and 0.3 mile S of the coast. It can be identified by its flat top. A tidal race occurs off the SW extremity of the island.

Toe Head (51°29'N., 9°14'W.), 29m high, is bluff and bold; it has been reported to be a good radar target at a distance of 13 miles. The coast between Toe Head and Kedge Island, about 4.5 miles WSW, is indented by a number of inlets and small bays.

The Stags (51°28'N., 9°13'W.) are a group of rugged, precipitous rocks lying 0.7 mile S of Toe Head. The group, from W, resembles pinnacles. Stag Sound, about 0.5 mile wide, is deep and lies between the rocks and Toe Head.

A stranded wreck lies about 0.2 mile S of The Stags and is marked by a lighted buoy.

The tidal currents between Baltimore Bay and Toe Head set in about the direction of the coast.

The tidal currents attain a rate of 2 to 2.5 knots at springs through Stag Sound.

Castle Haven (51°31'N., 9°11'W.), lying about 2.5 miles NE of Toe Head, is a small fishing harbor which affords good shelter to small craft. It is entered between **Horse Island** (51°30'N., 9°11'W.) and Skiddy Island, a conspicuous flat rock, about 0.5 mile NE. The inner entrance between Battery Point and Reen Point is free of dangers and has a least depth of 9.1m in the fairway, decreasing to 5.5m about 0.3 mile farther in.

A light is shown from Reen Point and a prominent ruined tower, 35m in elevation, stands on the E end of Horse Island. A conspicuous old tower stands on a hill about 0.8 mile NE of Toe Head.

The harbor is not suitable for vessels with a draft in excess of 3.5m. Vessels with a deeper draft anchor farther out, but are exposed to heavy swells. With S winds, heavy swells are felt well within the harbor. The currents within the harbor are negligible.

High Islands (51°31'N., 9°08'W.) consist of a group of islets and rocks lying about 2 miles E of the entrance to Castle Haven. High Island, the largest and outermost, is steep-to on its S side, but the rest of the group should not be approached too closely from any quarter. In fine weather, temporary anchorage can be taken, in depths of 12.8 to 16.4m, N of the group.

A rock, over which there is a depth of 12.8m, was reported (1978) to lie 2 miles SSE of High Island. A wreck, with a depth of 11.9m, lies about 1 mile NNE of the rock.

Directions.—To enter Castle Haven, steer a mid-channel course between Horse and Skiddy Islands until The Stags appear between Horse Island and the mainland. Alter course N and proceed to the anchorage with The Stags in range 209° with **Flea Islet** (51°30'N., 9°11'W.), astern, which will lead W of the foul ground which extends from Reen Point.

Sheela Point (51°32'N., 9°07'W.) lies about 2.7 miles NE of the entrance to Castle Haven and is the W entrance point of Glandore Harbor.

Glandore Bay lies between Sheela Point and Galley Head, 5.8 miles E. The bay consists, in its W part, of steep barren cliffs rising to hills inland; the E part consists of two sandy beaches separated by the rugged cliffs of Cloghna Head. Cloghna Rock, a pinnacle with a depth of 0.9m, lies 0.5 mile from the shore about 1.5 mile NW of Galley Head.

1.12 Glandore Harbor (51°34'N., 9°07'W.) located at the W end of Glandore Bay, is used by fishing vessels and small craft. It is entered between Sheela Point and Goat's Head, about 1 mile NE. Although open S, it affords better shelter to small vessels than Castle Haven, as it is protected from the force of the sea by the islands and rocks in the entrance. Sheela Rock, which dries 1.2m, lies SE of Sheela Point. The tidal currents are very weak in the harbor.

Adam Island, 30m high, lies in the entrance about 03 mile E of Sheela Point. Eve Island, 7m high, lies about 07 mile N of Sheela Point and should be passed on its E side as sunken rocks lie some distance off the W shore of the harbor abreast Eve Island.

The Dangers, a chain of three rocky patches, lie in midchannel from about 0.2 mile N of Eve Island for a distance of about 0.4 mile NNW; the rocks all dry except Sunk Rock, over which there is a depth of 1.8m and which is marked close N by a lighted buoy.

The S patch, which dries, is marked by beacons; the beacon marking the W end is a green mast surmounted by a cone topmark and the beacon at the E end is a red mast with a can topmark. The middle patch, which dries, is marked by a similar beacon, painted black and white in horizontal bands, and the N patch, which dries, is marked by a similar pole, surmounted by two cones, bases together.

The rocks are all steep-to and there are channels with depths of not less than 5.5m in the fairway on either side of them. The recommended track is to the W of The Dangers. Small craft with local knowledge can pass E of The Dangers.

The least charted depth in the entrance fairway is 18.9m, decreasing gradually to 5m and less within 1.3 miles of the entrance.

Anchorage.—A good berth, where vessels lie safely in any weather, is in 4m, with the E extremity of Eve Island in range with the W extremity of Adam Island, bearing about 153°, and with Kilfinnan Castle, standing on the NE shore, about 0.7 mile N of Eve Island, bearing 045°.

Directions.—Vessels should steer a course of 295° for Eve Island passing about midway between Adam Island and the NE shore. Round the E side of Eve Island at a distance of about 100m and having cleared it, bring its E extremity in range 153°, astern, with the W extremity of Adam Island. This course will lead W of The Dangers and to the anchorage.

Galley Head (51°32'N., 8°57'W.) resembles an island when viewed from E or W. The beach between Galley Head and Greggane Point, about 3 miles NW, is conspicuous from the offing.

A main light is shown from a prominent white tower, 21m high, standing on the extremity of the headland. A prominent ruined castle stands on the low isthmus connecting the head to the mainland.

Doolic Rock, with a sunken rock close S, lies about 0.5 mile SW of the head. Robber Bank, with a depth of 14.3m, lies about 2.2 miles SW of the head.

During favorable weather, small vessels can use the channel between Doolic Rock and Galley Head, but it is inadvisable with the wind against the tidal current when there can be heavy seas close to the head. Strong currents are experienced off Galley Head and Doolic Rock with the set off the head being toward the rock.

Clonakilty Bay is entered between Galley Head and Seven Heads, about 9.5 miles ENE. The bay has irregular depths in its outer part which almost break in S gales. Deep-draft vessels should keep in depths of more than 37m, or more than 55m in thick weather, when in the vicinity of the bay.

The currents in Clonakilty Bay are negligible. The currents in the vicinity of Seven Heads set in the direction of the coast; the spring velocity in both directions is about 2 knots.

Dirk Bay, on the W side of the entrance of Clonakilty Bay, affords anchorage during W winds to small vessels, in 5.5 to 7.3m, N of Bream Rock, a 7.3m patch on the W side of the bay between the entrance points. Dunnycove Bay, on the W side of Clonakilty Bay, affords sheltered anchorage, in depths of 9.1 to 12.8m, during offshore winds.

A conspicuous water tower stands 2.2 miles N of the shore of the bay about 7.2 miles NE of Galley Head.

Seven Heads (51°34'N., 8°43'W.) is a bold bluff headland. The offshore depths are irregular and rocky, and cause overfalls during the strength of the currents. A prominent old watchtower stands on the headland.

1.13 Courtmacsherry Bay (51°36'N., 8°37'W.) is entered between Seven Heads and Old Head of Kinsale, 7 miles ENE. Baun Bank, on which the sea breaks heavily during gales, has a least depth of 11m, and lies about 1 mile NE of Leganagh Point, the S extremity of Seven Heads. The bay is encumbered with numerous shoals and rocks. A harbor is formed by the estuary of a river which enters the bay about 4.5 miles NNE of Seven Heads. A light is shown from the W entrance point. The harbor is shallow and the sandbanks on each side of the channel are constantly shifting. The depths over the bar are less than 3m.

The currents between Seven Heads and Old Head of Kinsale follow the direction of the coast. The spring velocity in both directions is about 1.5 knots. The current setting E begins about 4 hours 20 minutes before HW at Cobh, and the opposite current about 2 hours after HW at Cobh. The currents in Courtmacsherry Bay are weak.

Seven Heads Bay, on the W side of Courtmacsherry Bay N of Legana Point, affords anchorage, during W winds, in depths of 11 to 14.6m in its outer part. Broadstrand Bay, also on the W side of Courtmacsherry Bay, affords good anchorage, in depths of 5.5 to 7.3m, in its outer part.

Directions.—Vessels having passed Baun Bank should steer for Wood Point, bearing 346°. This course leads W of Carrigrour Rock. If entering the harbor, this course should be maintained, subsequently adjusting course to pass 300m E of Wood Point and S of Courtmacsherry lighted buoy.

A vessel from E, having rounded Old Head of Kinsale, should steer 278° for **Lisle church** (51°37′N., 8°43′W.) and open N of Horse Rock which leads S of Black Tom, Barrel Rock, and Blueboy. When the summit of Burren Hill, about 1 mile NW of Wood Point, is seen bearing 313° over Coos Cove, close S of Wood Point, it should be steered for on that bearing. This course leads SW of Black Tom and over the SW end of Coolmain Patch in a least depth of 7.3m.

The extremities of Wood Point and Coolmain Point in range 280° lead between the dangers in the N part of Courtmacsherry Bay, but this passage should be used only in an emergency.

Old Head of Kinsale (51°36′N., 8°32′W.) has been reported to be a good radar target at a distance of 17 miles. A main light is shown from a conspicuous tower, 30m high, standing on the S extremity of the headland. A disused light-structure stands about 0.5 mile N of the light.

About 5 miles S of Old Head of Kinsale, the E current sets from about 2 hours after HW at Dover and sets irregularly NE to ESE. Its strongest set is ENE. The W current starts about 4 hours before HW at Dover and sets irregularly SW to W. Off the headland both currents set at a velocity of 2.5 knots at springs and cause a race which extends as far as 1 mile offshore.

Holeopen Bay East and Bullens Bay, located 0.7 mile and 2.2 miles N, respectively, of Old Head of Kinsale, afford temporary anchorage during W winds, in 9.1 to 14.6m.

Kinsale (51°42'N., 8°31'W.)

World Port Index No. 34340

1.14 Kinsale is situated 1.5 miles within the mouth of the Bandon River about 5 miles NNE of Old Head of Kinsale. The port consists of a fishing and resort town with a very small natural harbor which is easily identified by the river valley. It is entered between Shronecan Point and Preghane Point, about 0.6 mile ESE.

Tides—Currents.—Spring tides rise 3.5m and neap tides rise 2.7m.

The currents within the harbor usually set in the direction of the channel. The flood begins about 6 hours before HW at Cobh and the ebb at about HW at Cobh. The spring velocity in both directions is about 1.5 knots in the bend above Blockhouse Point and off the town. Elsewhere, the velocity is about 1 knot.

Depths—Limitations.—A sand and shingle bar lies across the channel about 0.3 mile S of the fort. There is a least depth of 3m on the bar.

A town quay, 60m in length, has depths alongside of 6.1m at MHWS and 2.7m at MLWN. Vessels lie partially aground at LW. The port can accommodate vessels up to 2,000 dwt with lengths of up to 85m and drafts of up to 4.5m.

Aspect.—Ardbrack Church on the E side of the harbor, about 1 mile within the entrance, is white and conspicuous. Charles Fort is conspicuous and stands 0.5 mile S of the church. A light is shown from the fort. The channel in the vicinity of Blockhouse Point, about 1.2 miles N of Shronecan Point, is marked by lighted buoys.

Pilotage.—Pilotage is not compulsory, but advisable. Pilots are available upon request. Pilots board at the Bulman lighted buoy. Vessels should forward their ETA 24 hours in advance and send an update 12 hours before arrival. The port working frequency is VHF channel 14.

Anchorage.—Anchorage within the harbor is limited to shallow draft vessels because of the depths on the bar and the narrowness of the channel. Anchor berths are located in the river near the town.

One or two vessels of not more than 5.5m draft may find safe temporary anchorage outside the bar, W of Lower Cove, about 0.6 mile N of Preghane Point, in a depth of 6.5m, with the Old Head of Kinsale in range approximately 195° with the point 0.3 mile NNW of Preghane Point. Although S gales send in a swell, vessels may ride there in safety.

Within the bar there is good, but confined anchorage W of **Summer Cove** (51°42'N., 8°30'W.), in 7.3 to 9.1m, sand and shells, about 0.1 mile from the E shore.

Between Blockhouse Point and the town there is also good, but confined anchorage for vessels in depths of 11 to 14.6m, keeping on the town side to avoid the shoal off Blockhouse Point. For 0.5 mile above the town, vessels may ride in security, in from 5.5 to 9.1m.

Caution.—Bulman Rock, with a depth of 1.2m, and Frower Patch, with a depth of 7.9m, lie 0.2 mile S and 0.3 mile SE, respectively, of Preghane Point.

1.15 The coast between Kinsale Harbor and Roberts' Head, about 8 miles NE, is generally high, bold and rocky, backed by moderately high hills. There are a number of bays along the coast, but they are too exposed to offer shelter.

Oyster Haven (51°41'N., 8°27'W.) is a small sheltered inlet 2 miles E of Kinsale Harbor. It is entered between Ballymacus Point and a point about 0.7 mile ENE; about 0.2 mile SSE of the latter point is Little Sovereign, a rocky islet, and midway between them is Sovereign Patch, with a least depth of 2.7m.

Kimure Point lies on the E shore of Oyster Haven, about 0.6 mile NE of Ballymacus Point.

The only danger in the haven is Harbor Rock, with a depth of 1.2m, about 0.5 mile within the entrance and midway between Ferry Point and the E shore. The best channel is W of the rock.

The anchorage is NE of Ferry Point, at the entrance of the W arm of the haven, in 4.6 to 6.1m. The anchorage is very confined, and is exposed to a heavy sea with SW winds.

Big Sovereign is an islet lying about 0.5 mile S of the entrance to Oyster Haven. It is precipitous and inaccessible and is divided into two parts by a cleft.

Reanies Point (51°43'N., 8°20'W.), about 4.5 miles ENE of Oyster Haven, is bold and precipitous, rising perpendicularly to an elevation of about 43m, and is remarkable for the number of gateposts or pillars on it. These are more conspicuous when approaching from E. About 0.5 mile E of Reanies Head is a small rocky patch having a depth of 6.7m; Cork Head, bearing 025°, well open of Roberts' Head, leads E of it.

Roberts' Head (51°44'N., 8°19'W.) is a bluff headland located about 1.5 miles NE of Reanies Point. It can be easily identified. A prominent ruined tower stands on a hill about 0.5 mile N of the head.

Daunt Rock (51°44'N., 8°18'W.), with a depth of 3.5m, lies on the W side of the approach to Cork Harbor, about 0.7 mile SE of Roberts' Head. It is marked on the E side by a lighted buoy. During S gales, the lighted buoy is often broken adrift.

There is a clear passage between Daunt Rock and Roberts' Head with depths of 14.6 to 18.3m, of which coasting vessels from the W may take advantage in moderate weather. In unsettled weather it should not be attempted, as the sea sometimes breaks across the passage from the rock to the head. Large vessels should invariably pass to seaward of Daunt Rock.

Tides—Currents.—The tidal current in the vicinity of Cork Sea Buoy (51°43'N., 8°16'W.) is rotary and clockwise. The E current sets N, NE, and finally E. The W current sets S, SW, and finally W. The E current starts about 5 hours 15 minutes before HW at Cobh, and the W current starts about 1 hour 15 minutes after HW at Cobh. The NE and SW sets are the strongest, attaining a velocity of 0.8 knot at springs and 0.5 knot at neaps. These velocities are affected by the force and direction of the wind.

On the E side of the approach to Cork Harbor between Power Head and Roche's Point, the currents are weak and barely perceptible.

Cork Harbor (51°51'N., 8°16'W.)

World Port Index No. 34360

1.16 Cork Harbor is a large sheltered port formed by the lower reaches of the River Lee. The city of Cork is situated on both sides of the river about 13 miles above the entrance. The port of Cobh (World Port Index No. 34350) is situated within Cork Harbor.

The port can accommodate fully laden vessels of up to 80,000 dwt at HW including general cargo, container, ro-ro, bulk, petroleum, and LPG vessels. In addition, the port has facilities for ship repair and building, including a graving dock, and functions as a base for craft serving the offshore exploration industry.

Tides—Currents

The currents in the harbor entrance between Fort Meagher and Fort Davis set in the direction of the channel at a velocity of 1 to 1.5 knots, increasing to 2 knots at springs. The flood begins about 5 hours 45 minutes before HW at Cobh and the ebb shortly after HW.

Within the harbor the currents in both directions generally follow the direction of the channel at velocities of up to 2 knots at springs. In the narrowest part of the river the velocity is about 3 knots.

The flood at Monkstown, about 1 mile above Haulbowline Island, begins about 5 hours before HW at Cobh and the ebb about 30 minutes after HW.

In the harbor entrance and harbor, and to a lesser extent in the river, the currents are affected by the winds. Southerly winds increase the flood and decrease the ebb; N winds have an opposite effect.

After a prolonged rainfall, the flood current within the river, and to a lesser extent in the harbor and entrance, is decreased and the ebb increased.

The tidal rise at the city of Cork ranges from 3.4m at neaps to 4.4m at springs. Tides in the Lower Harbor range from 3.3m at neaps to 4.1m at springs.

Depths—Limitations

The controlling depth in the entrance is 12.9m.

The entrance to Cork Harbor is 0.7 mile wide between Roche's Point Light on the E side of The Sound and Weaver's Point, to the W. It is divided into E and W approach channels by Harbor Rock, with a least depth of 5.2m, located 0.3 mile WNW of Roche's Point. Both channels are well marked. The E channel is the main channel and was dredged (1993) to a depth of 12.8m over a width of 152m.

The Upper Harbor comprises all the quays fronting the city of Cork and those serving the Tivoli industrial estate lying E of the city. The quays have alongside depths of 3.6 to 8.8m. Vessels of up to 15,000 dwt with lengths of up to 152m, can berth at Cork. Vessels of up to 5.5m draft can make the passage of the river at any stage of the tide. Vessels with fresh water drafts of 7.9 to 8.6m can berth at spring tides and with drafts of 7.6 to 7.9m at neap tides.

The Lower Harbor comprises the anchorages and berths lying S of Great Island, including principally Whitegate Marine Terminal serving the oil refinery on the E side and the deep-water berths at Ringaskiddy. The Lower Harbor berths have depths of 3.2 to 7.1m. Whitegate Marine Terminal has a maximum berthing length of 366m and an alongside depth of 11.9m.

Pfizer Jetty, W of Haulbowline Island, serves the chemical plant at Ballybricken. The berth is 259m in length between dolphins and a dredged depth of 9.5 alongside; vessels are limited to a draft of 10.8m on all tides.

Ringaskiddy Basin, close S of Pfizer Jetty, includes a ro-ro/ferry terminal and a deep-water berth. The ro-ro berth is 158m in length with a depth of 9.2m alongside. The deepwater berth is 335m in length with a dredged depth of 13.5m alongside. Fully laden bulk vessels of up to 60,000 dwt with drafts of up to 13m can be accommodated.

Marino Point chemical jetty, at the N end of West Passage, has a berth 375m long between dolphins with a dredged depth of 10m alongside. Vessels of up to 186m in length with a draft of 9.5m can be accommodated.

Whitegate Marine Terminal, situated on the E side of the harbor about 2.5 miles above the entrance, handles LPG and petroleum products. The terminal consists of a T-headed pier extending 760m NW from Corkbeg Island. The outer berth is 366m in length between dolphins and dredged to a depth of 11.4m alongside; tank vessels of up to 244m in length with drafts of up to 11.6m can be accommodated. Coastal tankers use the inside berth, which is 210m in length with an alongside depth of 10.2m.

Partly laden vessels of up to 90,000 dwt with drafts of up to 12m have entered the port at the highest tides.

Several yacht marinas are situated within the harbor.

Aspect

The approaches to Cork Harbor lie between **Cork Head** (51°45'N., 8°18'W.) on the W side and Power Head to the E. The land on each side of the entrance to the harbor is comparatively low. The entrance to the harbor lies between Roche's Point and Weaver's Point about 0.8 mile WNW. Entrance channels pass both sides of Harbor Rock which lies in the middle of the entrance.

The harbor is divided by Great Island into Lower Harbor and Upper Harbor. The town of Cobh stands on the S side of Great Island. Cork approach lighted buoy, equipped with a racon, is moored about 4.2 miles S of the harbor entrance.

A light is shown from Roche's Point. The entrance channels are marked by lighted buoys and indicated by ranges which can be seen on the chart.

The most conspicuous objects in the approach to Cork Harbor are the high bluffs of Dogsnose, on the E side of the entrance, and Ram's Head, about 0.6 mile N of Weaver's Point, on its W side. On the summit of the former is Fort Davis, close E of which is a conspicuous double wall, extending down the face of the hill to the sea.

On the summit of Ram's Head is Fort Meagher, on which is a flagstaff. The ruins of Templebreedy Church, which has a spire, stand on high land about 1 mile SSW of Fort Meagher.

There is a conspicuous water tower, with a radio mast close N of it, standing 0.3 mile WSW of Templebreedy Church. Roche's Point Lighthouse, the disused signal towers and Roche's Tower, about 410m E, are also conspicuous.

Within the entrance, the following objects may readily he identified: Spike Island, the conspicuous spire of Cohh Cathedral; the oil tanks on Corkbeg Island, and the town of Cobh, with a conspicuous water tower NE.

A conspicuous gas flare is occasionally emitted from Whitegate refinery chimney, 71m high, standing about 0.7 mile ENE of Fort Davis, but is not visible from the S. There are many other chimneys at the refinery. A conspicuous chimney, 152m high, stands at Aghada power station close E of the refinery berth.

Pilotage

Pilotage is compulsory for all vessels exceeding a length of 130m entering the harbor within an arc with a radius of 2.5 miles centered on Roches Point. Pilotage is compulsory for all vessels, regardless of length, W of **Spit Bank Lighthouse** (51°50.7'N., 8°16.5'W.). Vessels should send an ETA 24 hours in advance with any amendments up to 2 hours in advance. Pilots can be contacted on VHF channels. 16, 14, and 12.

Pilots board between the harbor entrance and the compulsory pilotage area W of Spit Bank Lighthouse. Pilots also may board, if required and weather conditions permit, outside Roche's Point (position required should be included in ETA). Within the area, a continuous listening watch should be maintained on the frequency designated by Cork Harbor Radio.

Vessels about to leave a berth should contact port operations to obtain the latest river and channel information.

Pilot launches, painted black and orange, are stationed at the boat harbor which lies 0.5 mile E of Cobh Cathedral. The pilot launches are also fitted with VHF radio.

Whitegate Marine Terminal may be contacted by VHF for berthing instructions.

Regulations

All vessels carrying hazardous or dangerous cargo and vessels having discharged a hazardous or dangerous cargo which have not been gas-freed must display the International Code flag "B", by day, and an all round red light by night, while within the port limits. The seaward limit of the port is a line joining Cork Head and Power Head.

Special dangerous cargo by-laws are in force and a copy should be obtained.

Vessels carrying anhydrous ammonia, or other chemicals in bulk, vessels carrying LPG and Petroleum Class 1 and Class 2 in bulk, and vessels having discharged a cargo of LPG or Petroleum Class 1 or Class 2 which have not been gas-freed are subject to the following regulations:

- 1. Vessels should have an IMO Certificate of Fitness or a certificate issued by a recognized classification society for the carrying of gas cargo or petroleum cargo.
- 2. Vessels should be capable of communicating on VHF (including VHF channel 16) at all times while underway.

- 3. Vessels should contact Cork Harbor Radio, as follows:
 - a. Before entering the ports limits, vessels should request and obtain permission to enter.
 - b. Before departing a berth, vessels should request and obtain permission to depart.
 - c. On clearing the port limits.
- 4. Port Operations will advise all shipping in the vicinity to keep well clear of any ammonia, chemical, LPG, or Class 1 or Class 2 petroleum tankers. During the day, vessels should only navigate in good visibility; at night, navigation will be subject to:
 - a. Good visibility.
 - b. No opposing traffic movements between Lighted Buoy R2 (51 52.7'N., 8 20.4'E.) and the upper port limits.
 - c. In the case of vessels carrying anhydrous ammonia in bulk, that contact has been established either by telephone or VHF so that jetty personnel are aware of the vessel's ETA.
- 5. Vessels should display the International Code Flag B by day and an all round red light by night while within the port limits.
- 6. Vessels should inform the Harbormaster whenever there is deterioration in the status of machinery (main engines, mooring and anchoring equipment, cargo handling equipment, steering gear, etc.) or navigational equipment.
- 7. Vessels should not anchor inside Roches Point except in the special anchorage for vessels with hazardous cargoes designated below.
- 8. Large crude tankers are advised to approach the harbor entrance from the Cork Lighted Buoy (51 42.9'N., 8 15.6'E.) on the range lights. Such vessels should embark the pilot at least 2.5 miles S of Roches Point Light and should not approach closer than this distance unless a pilot is on board.

In connection with item 4 above, priority of movement will be given to passenger vessels, vessels depending on the state of the tide, and vessels using tugs. Normally, vessels carrying hazardous cargoes will be the ones to suffer delays providing these are of reasonable duration.

Normally, vessels carrying hazardous cargoes will be required to remain outside the harbor until such time as they proceed to berth. An exception to this requirement will be that smaller vessels (up to 106.6m in length) may anchor in a specially designated anchorage (51 50.05'N., 8 16.23'E.) W of Lighted Buoys Nos. 12 and 14. Any vessel other than one carrying a hazardous cargo is prohibited from anchoring in this designated anchorage.

In addition, all vessels carrying dangerous or polluting goods should comply with the Merchant Shipping (Reporting Requirements for Vessels Carrying Dangerous or Polluting Goods) Regulations of 1995.

Vessels within the area should maintain a constant listening watch on the VHF frequency designated by Cork Harbor Radio (usually VHF channel 16).

Vessels about to leave a berth should contact Port Operations to obtain the latest river and channel information.

Signals

Copies of by-laws governing navigation, pilotage, regulation of goods on quays, and the carriage of petroleum and carbide of calcium, are obtainable from the General Manager and Secretary of the Cork Harbor Commissioners. Masters of vessels carrying petroleum or carbide of calcium are bound to give due notice to the Harbormaster's Office on Custom House Street, Cork.

Traffic.—A white signal mast stands on the NW knuckle of Haulbowline Basin Entrance. A red flag by day, or a red light at night, shown from the yard of the mast, indicates that naval vessels are about to enter or leave the basin. Vessels in the basin should remain alongside, and vessels shaping for the entrance should stand off, until the signal is hauled down to indicate that the entrance is clear.

Anchorage

If it should be necessary to anchor off the harbor with a N wind, a convenient berth, with the harbor open, will be found with Roche's Point Light bearing 034°, and Templebreedy Church bearing 309°, in about 18.3m, sand.

Vessels will find secure anchorage anywhere above **Dogsnose** (51°49′N., 8°16′W.). The Outer Anchorage is bounded as follows: N by the transit of Spit Bank Light and the spire of Scots Church at Cobh bearing 285°; S by a line joining the SW extremity of Spike Island and the root of Dogsnose Landing Quay; E and W by the 5m curve on either side of the fairway.

The area between Nos. 5 and 7 buoys and Nos. 8 and 10 lighted buoys is appropriated as an anchorage for large ships.

Vessels of shallow draft will find more room W of the fairway.

The quarantine anchorage is that part of Outer Anchorage between Nos. 9 and 11 lighted buoys.

Cobh Road lies between Cobh and Haulbowline Island, and provides good holding ground, in 12.8 to 18.3m. The Inner Anchorage extends, between the 5m curves, W of Cobh Road and is bounded E by a line joining the E end of J. F. Kennedy Pier at Cobh and the E extremity of Spike Island, and W by a line drawn across the harbor in a WSW direction from Black Point.

Small vessels, up to 106m in length, carrying hazardous cargo, may be allowed to anchor in the designated area W of Nos. 12 and 14 lighted buoys. The anchorage berth has a depth of 6m.

Caution

A submarine gas pipeline extends in a S direction from a point on the shore about 2.5 miles E of Roches Point.

Submarine pipelines and cables lie across the harbor within Cobh Roads and West Passage and may be seen on the chart.

A power cable with a vertical clearance of 53m crosses West Passage. A power cable with a vertical clearance of 24m crosses East Passage.

Harbor Rock, in the middle of the entrance, WNW of Roche's Point, is a rocky head, with a least depth of 5.2m.

Chicago Knoll, with depths of 5.8 to 7m, rock, is the extremity of a sunken ledge extending 0.3 mile from the E shore close N of Roche's Point.

Turbot Bank is a sandy bank over which there is a least depth of 10.4m, located about 0.5 mile NW of Roche's Point. A bank, having depths of between 8.3 and 9.3m at its outer end, extends about 0.3 mile NE of Weaver's Point.

Ram's Head Bank, with depths of less than 4.4m, extends about 0.3 mile from the W shore between Weaver's Point and Ram's Head; from it a spit extends 320m further E, with a least depth of 5m. A spit with depths of 9.4m at its outer end, extends about 0.4 mile W from the shore in White Bay. Dogsnose Bank, with depths of 5.4m and less, extends about 0.2 mile NW from Dogsnose, N of Fort Davis. Spit Bank, which dries 2.4m in places, extends nearly 1 mile E from Haulbowline Island.

The Bar extends NE across the main channel from the NE extremity of Spit Bank. Bar Rock, with a least depth of 4.3m, lies on the NW part of the bar, about 0.2 mile NNE of Spit Bank Lighthouse.

1.17 Power Head (51°47'N., 8°10'W.) lies about 3 miles ESE of the entrance to Cork Harbor. A conspicuous old signal station stands on the head and a conspicuous radio tower 125m in elevation, stands about 1.2 miles N of it. A dangerous wreck lies in an approximate position about 2.7 miles S of the head.

Pollock Rock, with a depth of 7.5m, lies about 1.8 miles SE of Power Head and is marked by a lighted buoy. Vessels of moderate draft may pass N of the rock in depths of 11 to 12.8m, but must take care to avoid the shoals and rocks lying close off Power Head.

Ballycotton Island (51°50'N., 7°59'W.) lies close E of a point about 7.5 miles ENE of Power Head. The coast between is high, precipitous, and foul for some distance offshore. Vessels are advised to remain in depths of over 20m.

A main light is shown from a structure, 15m high, standing on the summit of Ballycotton Island.

The Smiths, consisting of three drying rocks, lies about 0.8 mile offshore, 1.5 miles SW of Ballycotton Island.

Ballycotton Bay (51°50'N., 8°00'W.) is entered between Ballycotton Island and Knockadoon Head about 5.5 miles E. An old tower stands on Knockadoon Head and is prominent. Capel Island lies about 0.5 mile E of the head; a white tower, 37m high, stands on the summit of the island.

The bay affords good shelter in W and SW winds. The holding ground is good, the bottom being sand over mud and clay. Very little sea comes in between Ballycotton Island and the mainland, even at HW when W winds may prevail, but with the wind E of S, a heavy sea rolls in.

A small fishing boat Harbor is situated on the N side of the point close W of Ballycotton Island. It is protected by a breakwater and has a depth of 3.7m in the entrance which is 25m wide. A pier, 150m long, has depths of 2.4m alongside.

Anchorage may be taken in a depth of 12.8m with Ballycotton Island Light bearing 176°, distant 0.5 mile, where vessels are sheltered from the sea by the island, or closer to the harbor, according to draft.

The currents near the coast and within Ballycotton Bay are weak and barely perceptible, but set with some strength



Photograph Courtesy of Donald W. Carter

Ballycotton Light

between Ballycotton Island and the land, and between Capel Island and Knockadoon Head.

Kinsale Head Gas Field (51°22'N., 8°00'W.), consisting of two production platforms about 3 miles apart, lies 28 miles S of Ballycotton Island Light. A submarine gas pipeline extends from the field in a NNW direction to a point on the coast close W of Power Head.

Youghal Bay (51°55'N., 7°50'W.) is entered between Knockadoon Head and Ram Head about 7 miles NE. An old tower stands on Ram Head.

Youghal Harbor is situated at the head of the bay in the mouth of the River Blackwater. The approach to the harbor is encumbered by rocks, which are marked by buoys, and a bar. A light is shown from the W side of the harbor entrance.

The entrance is easily recognized in daytime by the opening between its high, bluff shores. Two channels cross the bar. The E channel is the deeper with a least charted depth of 2m. A depth of 1.8m lies 0.2 mile SW of the E point, just S of the charted channel. Tides rise 2.7 to 4m at springs. Pilotage is not compulsory, but advisable. There are no licensed pilots, but local fishermen offer their services. A number of quays which dry at LW front the town.

Vessels with drafts of up to 3m can berth alongside. Vessels of up to 1,200 dwt with lengths of up to 82m have been accommodated in the harbor.

Surveys carried out in 1990 indicated shoal areas of 5.6m and 3.6m lying about 0.4 mile SE and 0.1 mile E, respectively, of the clocktower and a drying bank centered about 0.2 mile NNE of the same tower.

It was reported (1991) that depths off the berth were 3m shoaling to 1.3m at the N end.

Anchorage.—Temporary anchorage in moderate weather and with offshore winds may be obtained in the W part of Youghal Bay, in 9.1 to 12.8m, sand and mud, with Capel Island bearing between 194° and 234°, distant 0.3 mile to 0.5 mile. In N winds, temporary anchorage may be obtained off Whiting Bay, on the N shore of Youghal Bay, but in unsettled weather and with onshore winds, vessels should keep underway.

About 19 miles NNW of **Ram Head** (51°57'N., 7°43'W.) are the sharp peaks of Knockmealdown Mountains, and about 10 and 12 miles E, respectively, of these mountains are the long ridges of Monavullagh Mountains and Comeragh Mountains; they are visible everywhere in the offing between Cork and Waterford.

1.18 Ardmore Bay (51°57'N., 7°43'W.), entered close N of Ram Head, offers temporary anchorage in 14.6m during fine weather. A conspicuous tower stands on the slope of a hill near the village at the head of the bay.

Dangerous wrecks lie about 1.5 miles SSW, 1.5 miles ENE, and 3 miles ENE of Ram Head.

Mine Head (51°58'N., 7°38'W.), about 5.5 miles ENE of Ram Head, is a bold precipitous headland. An above-water rock lies close E of the headland. A main light is shown from a prominent structure, 21m high, standing near the edge of the cliff on the head.

Currents between Ram Head and Helvick Head about 9 miles NE, generally follow the direction of the coast. The current setting E begins about 2 hours 15 minutes before HW at Cobh and the opposite current about 2 hours 30 minutes after HW at Cobh. The spring velocity of both currents off Mine Head is a little more than 1 knot and less in the bays on

either side. The currents are weak and irregular about 10 miles S of the head.

Helvic Head (52°03'N., 7°32'W.), about 4 miles NE of Mine Head, is a steep bluff, 67m high, on which stands a white watch house. On the N side of the head are some conspicuous whitewashed cottages with a building resembling a tower at their E extremity. A very small fishing harbor, protected by a breakwater, is situated about 0.2 mile W of the head. The harbor has depths of 1.2m in the entrance and is liable to silt.

Ballynacourty Point (52°05'N., 7°33'W.) lies about 1.5 miles N of Helvick Head. A light is shown from the point.

Dungarvan Harbor (52°05'N., 7°37'W.) is entered between Ballynacourty Point and Helvic Head. It consists of an extensive bay, mostly shallow and encumbered with dangers. A narrow channel with a least depth of 0.5m over the bar, leads to the town about 2.2 miles W of the entrance to the bay. Several mooring buoys are moored abreast the town and are used by fishing vessels.

Anchorage can be taken, in 7.3 to 9.1m, S of Ballynacourty Point with a castle 1.5 miles NNE bearing about 012°. The castle is conspicuous from the offing. Southwesterly gales raise a heavy sea.

Ballyvoyle Head lies about 2.7 miles NE of Ballynacourty Point. A tower in ruins stands close N of Ballyvoyle Head.

Bunmahon Village is situated about 5 miles ENE of Ballyvoyle Head. The buildings and tall stacks in the village are conspicuous from the offing.

Great Newtown Head (52°08'N., 7°10'W.) can be identified by the three conspicuous white towers on its summit. The colossal figure of a man with his arm extended E stands on one of the towers.

Tramore Bay (52°08'N., 7°10'W.) is entered between Great Newtown Head and Brownstown Head to the E. Two conspicuous black towers stand on Brownstown Head. The sandy beach at the head of the bay, fronting a large area of sunken land, gives it the appearance of an estuary in hazy weather. The spire of the church at Tramore on the NW side of the bay, is conspicuous.

Swines Head (52°08'N., 7°02'W.), the W entrance point of Waterford Harbor, lies about 5 miles E of Great Newtown Head. A rock, which dries, lies about 0.2 mile S of the head.

Currents 1.5 miles outside Tramore Bay are negligible from about 3 hours 30 minutes after HW at Cobh until about 3 hours 15 minutes before HW at Cobh. It then begins to set N toward Great Newtown Head and along the W shore of the bay at a velocity of about 1 knot at springs. The direction gradually shifts E at a decreased velocity and by 45 minutes before HW at Cobh it sets E. It continues its rotary movement ending in a S direction where it remains until about 30 minutes after HW at Cobh.

Waterford (52°08'N., 6°57'W.)

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1.19 The port of Waterford is formed by the estuaries of the River Suir and the River Barrow which join in a position

about 10 miles above the common entrance between Swines Head and Hook Head, 4 miles ESE. Waterford consists of a port and city situated on the River Suir about 5 miles W of the junction with the River Barrow. New Ross, a small port, lies on the River Barrow about 9 miles above its entrance.

Tides—Currents.—The rise of tide at Waterford is about 4.3m at springs and 3.4m at neaps.

The E current off the entrance of Waterford Harbor begins about 1 hour 15 minutes before HW at Cobh and the W current about 4 hours 45 minutes after HW at Cobh. The spring velocity in both directions does not exceed 1 knot. Inside the entrance the flood begins about 4 hours 30 minutes before HW at Cobh and the ebb about 45 minutes after. The spring velocity in both directions varies from 2.5 to 3 knots. The flood sets toward the W shore and the ebb toward the E. About 3.5 miles within the harbor, the currents follow the general direction of the river.

When the ebb is setting at maximum strength out of the harbor, a W current begins off Hook Head. The junction of these two currents is well marked by rips which extend toward Swines Head. When the W current S of Hook Head is setting at maximum strength, a turbulent sea known as "Tower Race" is created. This condition is intensified by opposing winds and gales.

Depths—Limitations.—The entrance to Waterford Harbor, 2.5 miles wide, is deep and clear of dangers in the fairway as far as **Creadan Head** (52°11'N., 6°57'W.).

There are quays on both sides of the river at Waterford which extend a considerable distance along the river bank. In addition, there are pontoons for facilitating the working of cargoes. The depths alongside the berths are 5.2 to 7.8m.

Due to the depth over the bars and the sharp bends in the River Suir, the size of vessel is restricted to about 137m in length with drafts of 7.3m at springs and 6.7m at neaps. Vessels of 10,000 dwt and partly laden vessels of up to 14,000 dwt have been accommodated at Waterford.

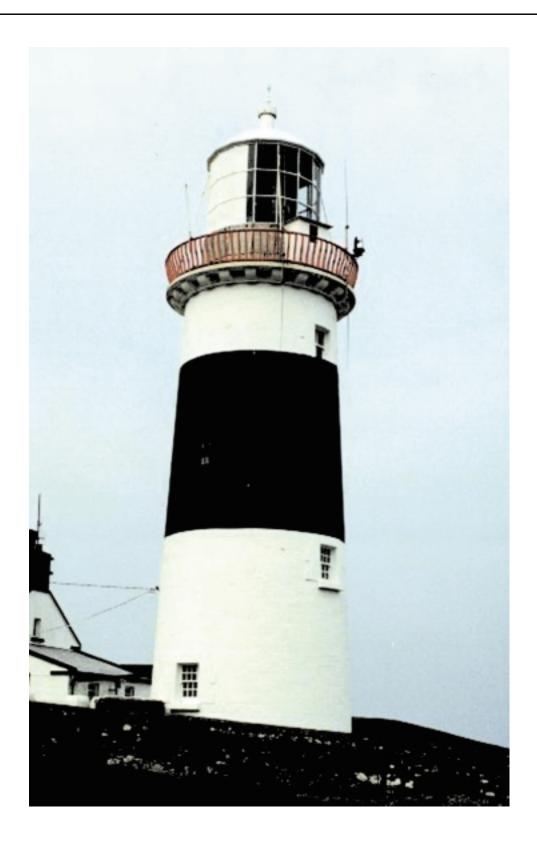
Aspect.—The W side of the entrance can be identified by the high shore terminating at Creadan Head, 4 miles NE of Swines Head. The E side is formed by a low peninsula of which Hook Head is the S extremity.

Dunmore East Harbor (52°09'N., 7°00'W.) lies within Dunmore Bay at the W side of the entrance about 2 miles NE of Swines Head; it has an entrance, 75m wide, with depths of about 2.6m and is used by fishing vessels, small craft, and yachts.

Navigation is restricted about 4 miles within the entrance, by the outer bar. The fairway then follows the deep channel for 6 miles to Cheek Point. Vessels bound for Waterford continue through Queens Channel up the River Suir.

The outer bar is an extensive tract of sand and gravel, lying between Creadan Head and Duncannon Point, about 2.5 miles NNE, with a least depth of 4m in the fairway. After a prevalence of N winds with dry weather, there is a depth of 0.3m less over the bar, but with S winds a contrary effect is produced.

Cheek Point Bar, with a dredged depth in the fairway of 6m, extends across the entrance of the River Suir between **Cheek Point** (52°16′N., 6°59′W.) and Drumdowney Point, the W entrance point of River Barrow, 0.7 mile NW.



Photograph Courtesy of Donald W. Carter

Mine Head



Photograph Courtesy of Donald W. Carter

Hook Head

Another bar, with a dredged depth of 6m, lies SW of Snowhill Point, about 0.4 mile SW of Drumdowney Point.

Queens Channel, N of **Little Island** (52°15'N., 7°03'W.), is dredged to a depth of 5.2m in the fairway.

City Reach extends NW and is 0.75 mile long. A flat, with a depth of 3.3m, extends from the shore fronting the quays to near midchannel. There are depths of 6.4 to 7.3m between it and the N shore. In midchannel, NW of the flat, there are depths of 11 to 14.6m.

A main light is shown from Hook Head. A racon is situated at the light.

In the approach to Waterford Harbor, the mountains inland are conspicuous in clear weather. Comeragh Mountains, about 20 miles WNW of Swines Head are readily identified, and E of them, and more distant, is Slieveanaman, 720m high. Nearer the coast is the remarkable peak of Tory Hill, 290m high, rising about 13.5 miles N of Swines Head, and the flat-topped Slieve Coiltia, 267m high, about 13 miles N of Hook Head. Farther E is the rugged hill of Carrick Byrne, rising about 5.5 miles ENE of Slieve Coiltia, and Forth Mountain, 232m high, rising about 13.5 miles E of the same mountain. As the land is approached, the high W shore of the entrance will be seen.

The light structure at Hook Head is prominent and a conspicuous large square building stands about 1.7 miles NNE of it. A white lookout tower, close S of Dunmore East Harbor, is conspicuous.

Pilotage.—Pilotage is compulsory for merchant vessels. Pilots board about 0.5 mile E of Dunmore East outer pier. Vessels should send an ETA 24 hours in advance. Pilot can be contacted by VHF.

Regulations.—Vessels carrying dangerous cargo, explosives, or petroleum products should inform the Harbormaster before entering the harbor.

Anchorage.—Dunmore Bay affords temporary anchorage with N winds, in 7.3 to 9.1m, mud, about 275m NNE of the light on the outer pier head.

The best anchorage is off Passage, where vessels may anchor in 9.1 to 11m, good holding ground, sheltered from all winds and sea.

Vessels of more than 90m in length are recommended to anchor with the front range light on Snowhill Quay bearing about 273°, and just open N of the N extremity of Cheek Point, and the light on the SE extremity of Cheek Point bearing about 220°, in 10.7m, mud.

Shorter vessels arriving at Waterford, will find a convenient berth abreast the Abbey Church, in 6.4 to 11m, or above the church, in the bight on the N side, in 6.4 to 9.1m.

There is room for a number of vessels, in depths of 7.3 to 11m, clear of the vessels at the quays, in the reach below the city, below Cromwell Rock, close to the W shore.

Caution.—Vessels are cautioned not to anchor in the vicinity of the submarine cables off Duncannon Point, nor in the vicinity of the ferry crossing at Passage.

Creadan Bank, with a least depth of 5.2m, lies about 0.5 mile S of Creadan Head.

A detached shoal, with a least depth of 3.4m, gravel, lies on the bar in a position about 1 mile N of Creadan Head. A buoy is moored on the E side of the shoal and marks the W side of the bar channel.

A buoy is moored W of the S extremity of Ballistraw Flat and marks the E side of the bar channel.

New Ross (52°23'N., 6°57'W.), a tidal port, lies 20 miles inland on the River Barrow. It has facilities for containers, roro, liquid and bulk cargos, and has 310m of available wharfage.

Depths—Limitations.—There are quays on both sides of the River Barrow at New Ross. Depths alongside the berths are 5.2 to 7.6m. Vessels are restricted in size by the width of the bridge opening and the sharpness of the bends in the river.

Vessels of up to 6,500 dwt with lengths of up to 105m, beams of up to 17.5m, and drafts of up to 6m at springs and 5.2m at neaps, can be accommodated at New Ross. For vessels of maximum dimensions, navigation is generally restricted to the period between 2 hours before and after HW in daylight only.

Vessels bound for New Ross enter the River Barrow through a swing bridge about 0.8 mile NW of Cheek Point. The swing bridge provides two openings, each 24m wide. Vertical clearance below the bridge when closed is 7.5m. Above the bridge a fairway passes over a bar with a least charted depth of 2.3m.

Pilotage.—Pilots for New Ross and River Barrow board off Cheek Point.

Coastal Features

1.20 Brecaun Bridge is a reef lying about 2 miles NE of **Hook Head** (52°07'N., 6°56'W.) which extends over 0.3 mile offshore, with a depth of 1.2m at its extremity. **Forth Mountain** (52°19'N., 6°34'W.), bearing 047°, and open SE of Baginbun Point, leads SE of this danger.

Baginbun Point, about 5 miles NE of Hook Head, is marked by a martello tower and a conspicuous church stands about 2 miles within the point.

Ingard Point (52°11'N., 6°49'W.) lies about 1 mile N of Baginbun Point and may be identified by a mill on its extremity. Between the two points there is a bight in which temporary anchorage in W winds may be obtained, in 8.2 to 11m, fine sand, with Baginbun Point bearing between 183° and 206°, distant 0.8 mile.

A very small harbor, which dries, lies close within Ingard Point. Bannow Bay, located close NE of Ingard Point, affords anchorage for small craft with local knowledge.

Ballyteige Bay lies between the entrance to Bannow Bay and Crossfarnoge Point about 8.5 miles ESE. It is unsuitable for anchorage and foul with shoals and rocks.

Crossfarnoge Point (52°10'N., 6°35'W.) lies 13 miles ENE of Hook Head. A light is shown from the point. Ballyteige Castle, nearly 1 mile NNE of the extremity of Crossfarnoge Point, a chapel with a belfry about 0.4 mile within the same point, and the tower of a chapel at Carrick, 6.5 miles NW of the point, are conspicuous. Forth Mountain, 8.7 miles N of Crossfarnoge Point, is visible in clear weather from all parts of Ballyteige Bay.

Small vessels may obtain anchorage in E winds, in 11 to 12.8m, sand and stones, with Crossfarnoge Point bearing between 094° and 116°, distant 0.5 to 1 mile.

Kilmore Quay is a small fishing harbor, which dries, lying close E of the point.

Saltee Islands (52°07'N., 6°37'W.) consists of two islands, Great Saltee and Little Saltee, which lie within 4 miles S of Crossfarnoge Point. Both islands are fronted by numerous rocks and shoals. A prominent beacon, consisting of a cairn of stones, stands near the S extremity of Little Saltee. Two passages lead through the islands and local knowledge is required. St. Patrick's Bridge, the more shallow passage, leads N of Little Saltee and is used by fishing vessels. Saltee Sound leads between the two islands and has depths in the fairway of 8 to 10m. The fairway is reduced to a width of about 0.3 mile between the foul ground extending from the islands.

Anchorage.—Anchorage may be obtained, in a depth of 7.9m, 0.6 mile NW of the N extremity of Great Saltee.

Temporary anchorage may be obtained during E winds leeward of the islands, out of the strength of the tidal currents, avoiding the dangers.

On the E side, anchorage may be obtained in depths of 14 to 15m, 0.6 mile NE of the beacon on Little Saltee.

1.21 The Brandies (52°06'N., 6°35'W.) are two drying rocks lying 1.7 miles SE of the S extremity of Great Saltee Island. The tidal current sets past these rocks with considerable strength and causes overfalls when they are covered.

Coningmore Rocks, about 1.5 miles S of Great Saltee Island, are three rocks, the largest, 4m high, can easily be recognized. Red Bank, with a depth of 7.9m, lies 1.5 miles W of Coningmore Rocks. The tidal current over the bank and the uneven ground to the S of it causes considerable overfalls. Coningbeg Rock lies 2.7 miles SSW of the S extremity of Great Saltee Island and its position is usually indicated by the wash of the sea over it.

Coningbeg Light-Float (52°02'N., 6°39'W.) is moored about 1.7 miles SSW of Coningbeg Rock; it has a red hull with the name painted in white letters on each side. A racon is situated at the light-float. Large vessels should pass to the S of the light-float.

Carnsore Point (52°10'N., 6°22'W.), 8.5 miles E of Crossfarnage Point, is 16m high and rocky. A prominent hut and flagstaff stand on the point. The coast between the points is low and fronted by offshore dangers.

The Bore is a rock with a depth of 5.5m, lying about 4 miles SSE of Crossfarnoge Point. Long Bohur with a depth of 4m, lies 1.2 miles N of The Bore.

Black Rock, 2m high, stands about 2.2 miles SW of Carnsore Point. A drying rock and a dangerous wreck are located 0.2 and 0.4 mile, respectively, N of Black Rock.

Barrels Rocks, which dry, lie about 1.8 miles SSW of Carnsore Point. A shoal with a depth of 5m over it, lies 0.5 mile NNW of the rocks. A lighted buoy is moored about 2 miles S of Carnsore Point.

Tides—Currents.—The tidal currents set roughly E and W from S of Hook Head to S of Saltee Islands. The currents are weak S of Hook Head, but increase E to a velocity of about 2 knots, in both directions, S of Great Saltee. The tidal currents decrease in strength N, but weak currents set along the coast between Hook Head and Crossfarnoge Point.

The currents around the Saltee Islands and rocks are very variable and affected by eddies. The currents at Coningbeg Light-float are more or less rotary in a clockwise direction. The direction and velocity of the currents at this light-float are often

irregular. The currents between Great Saltee and Carnsore Point set in an ENE-WSW direction at a velocity of about 2.5 knots. Eastward of Carnsore Point the currents set in a N-S direction along the E coast of Ireland.